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TITLE: STRUCTURE AND FORMING METHOD OF PROTRUDENT ELECTRODE
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ABSTRACT:

PURPOSE: To enable a protrudent electrode formed on an electronic element or a board to be improved in characteristics and enhanced in connection reliability when the electronic element is bonded facing downward.

CONSTITUTION: A resin 6 which contains metal particles 7 is formed on the Al electrode 2 of a semiconductor element 1. The semiconductor element 1 is dipped into a plating bath, the metal particles 7 protruding from the resin 6 serve as nucleuses to enable a metal film 8 to grow, whereby the metal film 8 is formed both on the resin 6 and on the AE electrode 2, and a protrudent electrode provided with a resin layer 6 is formed on the Al electrode 2. Therefore, bumps can be formed at a very small pitch. Furthermore, the metal particles 7 are contained in the resin 6, whereby the metal film 8 can be easily formed, and the metal film 8 is enhanced in adhesion to the resin 6 owing to the anchor effect of the metal particles 7, and in result a semiconductor of high reliability can be provided.

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